JOURNAL OF ELECTROANALYTICAL CHEMISTRY

Vol. 325 Nos. 1 and 2 23 MARCH 1992

CONTENTS

On adsorption rate modelling in electrochemical reactions
K. Scott (Newcastle, UK) 1

Numerical simulation of the time-dependent current to membrane-covered oxygen sensors. Part I. The switch-on transient
D.J. Gavaghan, J.S. Rollett and C.E.W. Hahn (Oxford, UK) 23

Microstructure of the metal–solvent interface
A.I. Karasevskii, R.E. Kris, E.V. Panov and A.V. Gorodyskii (Kiev, Ukraine) 45

Linear sweep voltammetry at ring microelectrodes. The reversible case
U. Kalapathy, D.E. Tallman and S. Hagen (Fargo, ND, USA) 65

Amperometric enzyme electrodes. Part VI. Enzyme electrodes for sucrose and lactose
W.J. Albery, Y.N. Kalia and E. Magner (London, UK) 83

The ac impedance of a three-ion thin layer cell
W.J. Albery and A.R. Mount (Oxford, UK) 95

Characterization of oxide films electrochemically deposited from solutions of palladium chloride and sodium hexachloroiridate
R.K. Jaworski, J.A. Cox (Oxford, OH, USA) and B.R. Strohmeier (Alcoa Center, PA, USA) 111

Behaviour of some monocarboxylic acids in propylene carbonate: a conductance study
R.N. Pandey and M.G. Bapat (Varanasi, India) 125

Peculiarities of the polarographic behaviour of chloroform–18-crown-6-ether complexes and determination of stability constants of the chloroform–18-crown-6-ether–lithium ion triple complex in aqueous medium
S.G. Mairanovskii (Moscow, USSR), S.H. Erbekov and R.U. Vakhobova (Dushanbe, USSR) 135

Electrochemistry of 9,9′-bifluorenylidene. Detection of the radical species by spectroelectrochemical and EPR methods
M. Otero, E. Roman (Santiago, Chile), E. Samuel and D. Gourier (Paris, France) 143

Calibration of anion permeation in K^+ ion-selective electrode membranes using impedance methods
E.M.J. Verpoorte and D.J. Harrison (Edmonton, Canada) 153

Investigation of the processes of electrochemical perfluoroalkylation and fluorosulphation. Part 1. Electrode processes and the electrochemical perfluoroalkylation mechanism
V.A. Grinberg and Y.B. Vassiliev (Moscow, USSR) 167

Investigation of the processes of electrochemical perfluoroalkylation and fluorosulphation. Part 2. Characteristics of electrode processes of fluorosulphate anion oxidation in fluorosulphonic acid and the mechanism of fluoro-olefin fluorosulphation
V.A. Grinberg and Y.B. Vassiliev (Moscow, USSR) 185

Temperature dependence of double-layer parameters of the silver (100) face. Comparison with other silver faces
L.M. Doubova (Padua, Italy), A. Hamelin, L. Stoicoviciu (Meudon Cedex, France) and S. Trasatti (Milan, Italy) 197

Raman spectroscopy of silver plating from a cyanide electrolyte
G. Lacconi, B. Reents and W. Plieth (Berlin, Germany) 207

Electrocatalysis of metalloporphyrins. Part 10. Electrochemical oxidation and reduction of water-soluble cobalt(III)-tetrakis(4-trimethyl-ammoniumphenyl)porphyrin
D. Pang, Z. Wang and C. Cha (Wuhan, People's Republic of China) 219

Standard oxidation potentials of methylbenzenes in acetonitrile
C. Amatore and C. Lefrou (Paris, France) 239

The mechanism of electroless Ni–P deposition studied by electrochemical mass spectrometry
Z. Jusys, J. Liaukonis and A. Vaškelis (Vilnius, Lithuania) 247

Cathodic contact glow discharge electrolysis under reduced pressure
S.A. Campbell (Southampton, UK), V.J. Cunnane (Limerick, Ireland) and D.J. Schiffrin (Liverpool, UK) 257

Chronopotentiometric studies of polyaniline films
M. Kalaji, L. Nyholm and L.M. Peter (Southampton, UK) 269

Electrocatalytic oxidation of alcohols on glassy carbon electrodes electrochemically modified with nickel tetraazamacrocyclic complexes: mechanism of film formation
G. Rosłonek and J. Taraszewska (Warsaw, Poland) 285

Behaviour of alkaline earth metals and silver perchlorates and their complexes with some crown ethers in propylene carbonate
A.K. Srivastava and B. Tiwari (Bombay, India) 301

Catalytic effect of under-potential deposited layers on the ferrous/ferric outer-sphere electrode reaction
Z. Nagy, L.A. Curtiss, N.C. Hung, D.J. Zurawski and R.M. Yonco (Argonne, IL, USA) 313

Multiple redox reactions and electrochromism of bilayer membranes of Prussian blue and $Ru(bpy)_3^{2+}$
M. Kaneko (Saitama, Japan), S. Teratani and K. Harashima (Tokyo, Japan) 325

The likelihood of two-dimensional condensation of 3-*p*-tolyl-2-phenyl indenone on polycrystalline iron in sulphuric acid
M. Bozhinov, I. Betova, E. Lazarova and R. Raicheff (Sofia, Bulgaria) 333

Short communications

Effect of comproportionation on the voltammetric reduction of methyl viologen in low ionic strength solutions
J.D. Norton and H.S. White (Minneapolis, MN, USA) 341

Effects of supporting electrolyte on the partitioning of cation/neutral couples into perfluorosulfonate films
H. Van Ryswyk, C.H. Kim and T.A. Staley (Claremont, CA, USA) 351

In-situ EPR studies on the anion radicals of naphthylhydrazones in DMSO
D. Vasudevan, C.S. Venkatachalam and C. Kalidas (Madras, India) 359

Preliminary notes

Thermal behavior on a polyaniline electrode in zinc sulfate aqueous solution
Y. Maeda and A. Katsuta (Toyohashi, Japan) 365

The influence of oxygen vacancies on the kinetics of water photoelectrolysis at (001) n-TiO_2 rutile
M.L.G. González and P. Salvador (Madrid, Spain) 369

Announcement 377

Author index 379

Subject index 380